REMARKS/ARGUMENTS

Favorable reconsideration of this application as presently amended and in light of the following discussion is respectfully requested.

Claims 1-20 are active in this case. Claims 3 and 13 having been amended by the present Amendment.

In the outstanding Official Action, Claim 3 was objected to as having informalities requiring correction. Claim 1 was rejected under 35 USC §102(b) as being anticipated by Mohwinkel and Dougherty. Claims 1 and 11 were rejected under 35 USC §102(b) as being anticipated by Presser. Claims 1, 4, 11 and 14 were rejected under 35 USC §102(b) as being anticipated by Suematsu et al. Claims 1, 4, 11 and 14 were rejected under 35 USC §102(b) as being anticipated by Staudinger et al. Claims 2, 3, 5-10, 12, 13 and 15-19 were objected to as being dependent upon a rejected base claim, but were otherwise indicated as being allowable if rewritten in independent form.

Applicants acknowledge with appreciation the indication of allowable subject matter. However, since Applicants consider that the independent Claims 1 and 11 patentably define over the prior art, the remaining dependent claims have presently been maintained in dependent form. However, Claims 3 and 13 have been amended to correct minor informalities and no new matter has been added.

Applicants respectfully submit that Claims 1 and 11 state novel features clearly not taught or rendered obvious by the prior art of record. One such feature is the provision of the recited inductor element "having an inductance value selected in accordance with the predetermined frequency of said controlled signal," and another recited feature is that the inductor element "[forms] a series resonance circuit with a reactance component of a gate-to-source impedance when a drain voltage of said FET is lower than a source voltage thereof."

In contrast, Mohwinkel disclosed provision of an inductor 208 for biasing the source of the FET 202, as shown in Fig. 11 of Mohwinkel. The inductor 208 cuts off the high frequency signal by the DC signal, but the inductor 208 does not form a portion of the series resonance circuit with the reactance component of gate-to-source impedance of the FET 202. If the inductor 208 forms a portion of the series resonance circuit, the inductor 208 forms a portion of the series resonance circuit, the signal would not be transmitted at the subsequent SLOTLINE side.

Although Applicants' invention significantly decreases the amount of signal transmission when the drain voltage of the FET is lower than the source voltage, such a circuit operation cannot be realized by Mohwinkel.

Furthermore, although Applicants' invention sets the inductance of the inductor element in accordance with the frequency of the controlled signal inputted to the gate of the FET, Mohwinkel neither discloses nor suggests the inductance of the inductor 208, and clearly does not link the inductance of the inductor 208 to the frequency of a controlled input signal..

Furthermore, Dougherty shows in Fig. 2 an in-phase amplifier element in which the inductor 44 is connected to the source of the FET 42. The inductor 344 does not constitute a portion of the series resonance circuit what the reactance component of the gate-to-source impedance of the FET 42. If the inductor 44 constitutes the series resonance circuit, the in-phase amplifier does not correctly perform an amplifying operation.

Cazaux in Fig. 2 shows an active inlet matching circuit 2 in which an inductor L1 is connected to the source of the FET T1. The circuit 2 transmits the input signal to the subsequent phase shift circuit 1, but the circuit 2 does not constitute a series resonance

circuit. If the circuit 2 constituted a series resonance circuit, the input signal would not be transmitted to the phase shift circuit 1.

Presser in Fig. 4 discloses a resonance circuit in which an inductor 74 is connected to the source of FET 22. The inductor 74 performs regenerative feedback so than a negative resistance is obtained between the drain and the source of the FET 22. Presser neither discloses nor suggests that the reactance component of the gate-to-source impedance is used as an element constituting a resonance circuit with the inductor 74. The direct voltage VG is inputted via the inductors 60 and 62 to the FET 22 of Presser. Although Applicants' invention sets the inductance of the inductor element in accordance with the frequency of the controlled signal inputted to the gate of the FET, a direct voltage VG is applied to the FET 22 of Presser. Accordingly, the inductance of the inductor 74 is not set in accordance with the frequency of the gate voltage of the FET 22.

In Fig. 10 of Suematsu, there is shown a circuit in which inductor 65 is connected to the source of FET 32. The circuit branches the input signal IN to two outputs OUT1 and OUT2. The inductor 65 does not constitute a portion of a series resonance circuit with the reactance component of the gate-to-source impedance of the FET 32. If the inductor 65 constitutes a portion of the series resonance circuit, the input signal IN is not transmitted to the outputs OUT1 and OUT2.

Staudinger in Fig. 2 shows an attenuator in which an inductor 50 is connected to the source of the FET 38. The inductor 50 constitutes a series resonance circuit with the capacitors 52 and 64 and the inductor 62, and the direct voltage VCNTL is inputted to the FET 38. Staudinger neither discloses nor suggests that the reactance component of the gate-to-source impedance of the FET 38 is used as the elements for constituting the series resonance circuit with the inductor 62. Although Applicants' invention sets the inductance of

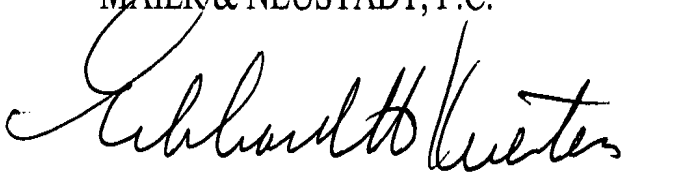
the inductor element in accordance with the frequency of the controlled signal inputted to the gate of the FET, a direct voltage VCNTL is applied to the FET 38 of Staudinger. The inductance of the inductor 62 is not set in accordance with the frequency of the gate voltage of the FET 38.

From the above description of the prior art, it is seen that the deficiencies in the prior art are manifest, and clearly the prior art collectively, absent hindsight, does not teach or obviate the features of the claimed invention above noted. Futhermore, such features certainly are not inherent in the prior art circuits. On that basis, it is respectfully submitted that the pending claims patentably define over the art of record.

Accordingly, withdrawal of the grounds for rejection is believed to be in order and is respectfully requested. An early and favorable action to that effect is earnestly solicited.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,
MAIER & NEUSTADT, P.C.



Eckhard H. Kuesters
Attorney of Record
Registration No. 28,870

Customer Number
22850